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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/605,038      | 09/03/2003  | Tim A. Matus         | ITW7510.062         | 2037             |

33647 7590 04/07/2005

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| EXAMINER |
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PASCHALL, MARK H

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| ART UNIT | PAPER NUMBER |
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3742

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

- 5P

|                              |                                      |                                      |  |
|------------------------------|--------------------------------------|--------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/605,038 | <b>Applicant(s)</b><br>MATUS, TIM A. |  |
|                              | <b>Examiner</b><br>Mark H Paschall   | <b>Art Unit</b><br>3742              |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9-11, 13-20 and 22 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 12, 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6,9-11,13-20,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schneider et al in view of Schutz.

Schneider teaches a plasma torch system for cutting having a power source connected to a plasma torch and multiple feedback signals from the torch to the power source/controller. Schneider et al do not show the claimed feedback path comprising a serialization circuit. Note in column 4 lines 50-64 Schneider et al mention that, "feedback may be provided from cutting power supply 104 and/or output lines 108,108, and/or torch 106,to controller 110". The feedback signals can comprise trigger signals voltage or current sensings, etc. the patent to Schutz teaches that is conventional to use a serialization circuit, block 8, to communicate feedback signals from a torch 17,2 to a controller 15 and use of the same provides accurate and efficient control. In view of this teaching it would have been obvious to modify the Schneider et al system with a state of the art feedback system comprising a serialization system, as taught in Schutz, in lieu of conventional wire communication, such modification providing more accurate, efficient and faster communication between the torch and the remote controller. Note that means

Art Unit: 3742

2 in Schutz is attached directly to the torch body and is considered part of the torch body. AS per claim 2 notes the plurality of feedback signals set forth above. AS per claim 4 use of particular signals sensed is a choice left to the discretion of the artisan, dependent on the end use of the torch. The serialization link in Schutz does comprise a single link as claimed in claim 5. Use of particular voltage as per claim 10 is an obvious choice depending on the end use of the torch. As per claim 11 standard operating serialization circuits would arrange the signals in a queue note that Schutz in column 8 paragraph 3 sets forth control of the plasma process via the communication link.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection. Applicant states in the remarks that the Schneider et al patent does not teach sensing in any manner and that the Examiner is incorrect in this interpretation. Applicant's attention is drawn to column 4 lines 48-64 which do mention that feedback may be provided from the torch 106 and may include voltage, current, functions thereof, trigger signal, and the like. It is very obvious to one of skill in the art that a voltage or current feedback signal indicates the presence of a sensor. Applicant should also note that claim 1 for instance mentions "feedback signals" only, as does Schneider et al.

Art Unit: 3742

***Allowable Subject Matter***

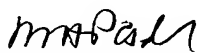
Claims 7,8,12,21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not teach overriding the serialization circuit to process problematic or safety conditions, as set forth in the above claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark H Paschall whose telephone number is 703 308-1642. The examiner can normally be reached on 7am - 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (703) 305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Mark H Paschall  
Primary Examiner  
Art Unit 3742

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